

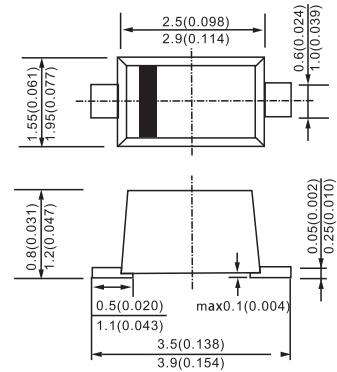
### FEATURES

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass Passivated Chip Junction
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product : 99% Sn can meet RoHS environment substance directive request

### MECHANICAL DATA

- Case: JEDEC SOD-123FL, Molded plastic over passivated junction.
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes positive end (cathode)
- standard Packaging : 8mm tape (EIA-481)
- Approx. Weight: 0.0168 gram

### SOD-123FL



Dimensions in millimeters

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GS1000FL	GS1001FL	GS1002FL	GS1004FL	GS1006FL	GS1008FL	GS1010FL	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Current (Note 1)	$I_{F(AV)}$	1.0							A
Peak one cycle surge forward current (non-repetitive)	$I_{FSM}$	30 (60Hz)							A
Maximum Forward Voltage at 1.0A	$V_F$	1.1							V
Maximum DC Reverse Current at $T_J=25^\circ\text{C}$ Rated DC Blocking Voltage $T_J=125^\circ\text{C}$	$I_R$	1 50							$\mu\text{A}$
Typical Junction capacitance at 4V, MHz	$C_J$	4							pF

### ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

PARAMETER	SYMBOL	GS1000FL	GS1001FL	GS1002FL	GS1004FL	GS1006FL	GS1008FL	GS1010FL	UNITS
Typical thermal resistance (Note 2)	$R_{JA}$	65							$^\circ\text{C} / \text{W}$
Operating and Storage Temperature Range	$T_J, T_{STG}$	-50 to +150							$^\circ\text{C}$

#### NOTES:

1. Pulse test: 300u pulse width, 1% duty cycle.
2. Soldering land: 6mm x 6mm

### RATINGS AND CHARACTERISTIC CURVES

### GS1001FL THRU GS1010FL

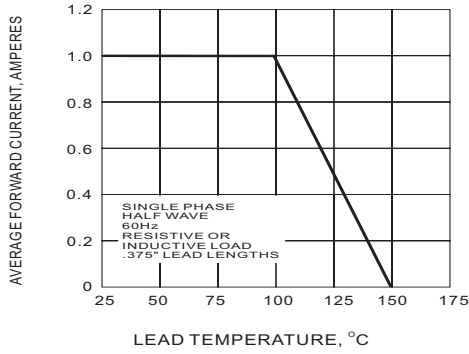


Fig.1 FORWARD CURRENT DERATING CURVE

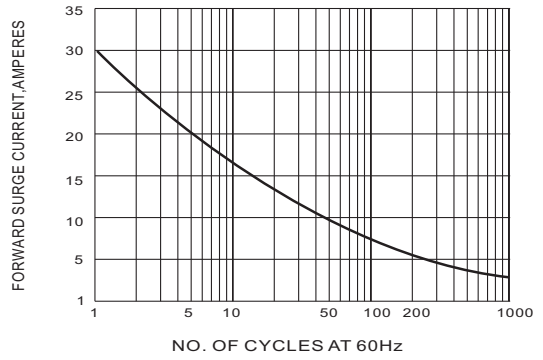


Fig.2 PEAK FORWARD SURGE CURRENT

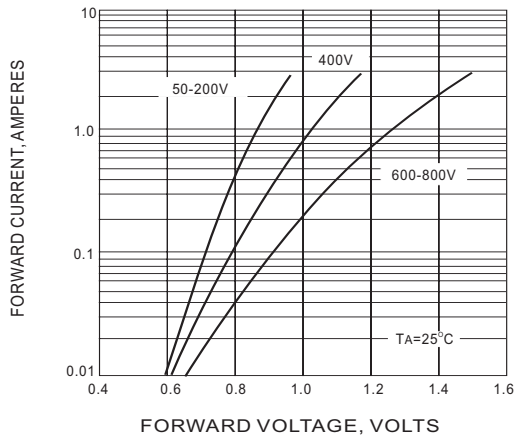


Fig.3 FORWARD CHARACTERISTICS

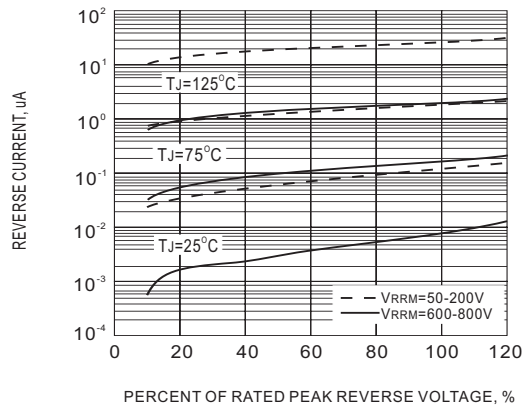


Fig.4 TYPICAL REVERSE CHARACTERISTICS

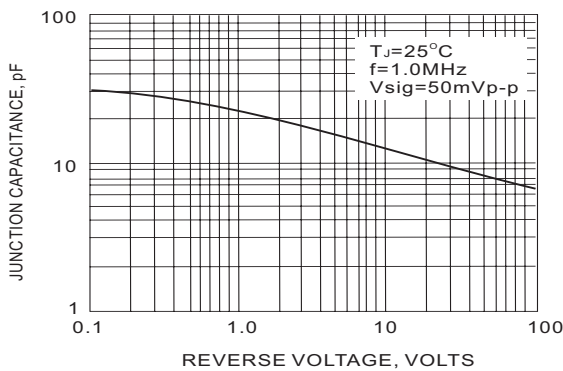


Fig.5 TYPICAL JUNCTION CAPACITANCE